



10CS/IS761

Seventh Semester B.E. Degree Examination, Dec.2017/Jan.2018 C # Programming and •NET

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions, selecting atleast TWO questions from each part.

PART - A

1 a. What is •NET framework? List and explain its features.

(08 Marks)

b. What is metadata? Describe its role in •NET framework.

(06 Marks)

c. Describe the building blocks of •NET framework.

(06 Marks)

2 a. Explain how you build C# application using CSC exe.

(06 Marks)

- b. Write a c# program to display message box dialogue containing "Hello World" message using class.

 (07 Marks)
- c. Write a C# program to count the number of object instances create inside or outside of an assembler. (07 Marks)
- 3 a. How do you process command line arguments in C# programs? Give one example.

(06 Marks)

b. Describe any four members of system-console class?

(04 Marks)

- c. What are method parameter modifiers? Name and explain all the available method parameters modifiers in C# (10 Marks)
- 4 a. Briefly describe the support of C# language for the main pillars of object oriented programming. (09 Marks)
 - b. What is "has a" relation? how it is implemented in C#.

(05 Marks)

c. What are the advantages of using virtual and override key words in C# programs? Give one example. (06 Marks)

PART - B

- 5 a. What are bugs, errors and exceptions? List and explain the core members of system. exception type. How would you build custom exception? (10 Marks)
 - b. What is object lifetime? Explain the garbage collection optimization process in C#

(06 Marks)

c. Write C# application to illustrate handling multiple exceptions.

(94 Marks)

- 6 a. What is an interface? Explain with an example implementation of interfaces in C#.(06 Marks)
 - b. Explain in detail the IConvertable Interfaces along with its different supporting method types. (08 Marks)
 - c. How do you build ICloneable interface types? Give one example.

(06 Marks)

- What are delegates in C#? Give one example.
 - Discuss the members of system. Multicast delegate base class. b.

(06 Marks) (08 Marks)

With an example, discuss the advanced keywards of C#: checked, unchecked, unsafe, stackalloc, volatile and sizeof.

(06 Marks)

- 8 Write short notes on:
 - •NET framework assembly format a.
 - Classic COM binaries versus •NET assemblies
 - Cross language inheritance
 - Shared assembly. d

(20 Marks)